



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D2600-1-190
Job Sheet 202017



Part No: D2600-1-190

Job Qty: 99 pcs

Part Name: Extrusion Round 3" 206



Part Weight: 0 lbs

Job Created: 10/17/19

Due Date: 10/24/19

Type: Stock

Note: DWG REV E

Ship Via:

Status: New

Priority: Medium

Job Tracking No:

Created By: Chantal Lavoie

Description:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard	Workcenter/Supplier		Sign-off
					Setup Run Hrs Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	DAS 99 13 pcs 9-89 POH3044146	10/24/19	10/24/19	0.00 0.00	Purchasing - 1 Purchasing - 2 Purchasing - 3	DAS 81 9-89	NOV 27 2019
110	Packaging 2-1 - Receive - B4B	99 pcs	10/24/19	10/24/19	0.00 0.00	Packaging 2 - 1 - B4B Packaging 2 - 2 - B4B Packaging 2 - 3 - B4B Packaging 2 - 5 - B4B Packaging 2 - 4 - B4B Packaging 2 - 6 - B4B Packaging 2 - 7 - B4B Packaging 2 - 8 - B4B Packaging 2 - 9 - B4B Packaging 2 - 10 - B4B Packaging 2 - 11 - B4B Packaging 2 - 12 - B4B Packaging 2 - 13 - B4B Packaging 2 - 14 - B4B Packaging 2 - 15 - B4B Packaging 2 - 16 - B4B Packaging 2 - 17 - B4B Packaging 2 - 18 - B4B Packaging 2 - 19 - B4B Packaging 2 - 20 -	DAS 81 9-89	NOV 27 2019



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S235271



Part: D2600-1-190

Job No: 202017

Serial No/Batch: S235271

Revision:

Inspector:

Exp Date:

Instructions: Various STC's

Date: 11/27/19

Plex 10/17/19 3:07 PM Dart.Lavoie.Chantal

				B4B	
				Packaging 2 - 21 - B4B	
				Packaging 2 - 22 - B4B	
				Packaging 2 - 23 - B4B	
				Packaging 2 - 24 - B4B	
				Packaging 2 - 25 - B4B	
				Packaging 2 - 26 - B4B	
				Packaging 2 - 27 - B4B	
				Packaging 2 - 28 - B4B	
				Packaging 2 - 29 - B4B	
				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
				Packaging 2 - 36 - B4B	
120 QC 6	99 pcs	10/24/19	0.00 0.00	QC 6 - 9	
				QC 6 - 88	
				QC 6 - 61	
				QC 6 - 40	
				QC 6 - 81	
130 Packaging 3-1 - Stock - B4B	99 pcs	10/24/19	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	

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					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	TF
					Packaging 3 - 27 - B4B	
					Packaging 3 - 28 - B4B	
					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	
					Packaging 3 - 36 - B4B	
140	QC 21 - SA	99 pcs	10/24/19	0.00 0.00	QC 21 - SA - 21	DAS 21
					QC 21 - SA - 70	9-50 NOV 29 201
					QC 21 - SA - 53	
Part Op 100 - (Purchasing) Issue P/O: <u>044146</u> a) Extrude as per Dwg D2600 b) Material: 6061-T6 c) Material Descriptions: certification is required. ***EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS.*** MUST BE WELL PACKAGE, IF NOT IT WILL BE REFUSE*** 110 - (Receive & Inspect for Damage & Mat'l Certs) Ensure material certification is attached 120 - (QC6- All purchased or subcontracted products) Check Pull test per Dwg D2600 for compliance page attached Check hardness with Webster tester 130 - (Identify as per dwg & Stock Location: <u>HALL</u>) LOCATION : LG002 140 - (QC21- Final Inspection - Work Order Release)						
Job BOM						
Part / Item	Component Name	Quantity	Operation	Container		
D2600-1-190P	Extrusion Round 3" 206	99 pcs (1 ea)	100-Purchasing			
Job Allocations						
Operation	Component Part	Required	Inventory	Allocated		
100-Purchasing	D2600-1-190P	99	0	0		
Part Specifications						
Specifications could not be found.						

SPECIFICATION CONTROL DRAWING

D2600-X-XXX EXTRUSION

NOTES:

1) MATERIAL: 6061-T6 ALUMINUM PER QQ-A-20018 OR AMS-QQ-A-20018 OR ASTM B221

MINIMUM TENSILE YIELD STRENGTH = 35 KSI

MINIMUM ULTIMATE TENSILE STRENGTH = 40 KSI

MINIMUM ELONGATION = 8%

A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY TO ENSURE THAT THE BATCH MEETS THE ABOVE MINIMUM MECHANICAL PROPERTIES

2) FINISH: N/A

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: IDENTIFY WITH DART P/N & BIN PER DART QSI 044 6.1 (FINE POINT PERMANENT INK MARKER)

7) WEIGHT: D2600-1 = 0.078 lb/in, D2600-3 = 0.130 lb/in, D2600-5 = 0.045 lb/in, D2600-7 = 0.091 lb/in

8) NO TOOLING MARKS

9) FOR D2600-1, PART NUMBER IS D2600-1-XXX WHERE XXX IS CUT LENGTH (EX. D2600-1-160 IS 160" LONG). D2600-1 EXTRUSION MANUFACTURED FROM:

- CARADON INDALEX DIE # MH-18870
- SIGNATURE ALUMINUM (BON-L) DIE # 897121

10) FOR D2600-3, PART NUMBER IS D2600-3-XXX WHERE XXX IS CUT LENGTH (EX. D2600-3-120 IS 120" LONG). D2600-3 EXTRUSION MANUFACTURED FROM:

- CARADON INDALEX DIE # MH-18858
- SIGNATURE ALUMINUM (BON-L) DIE # 897122

11) FOR D2600-5, PART NUMBER IS D2600-5-XXX WHERE XXX IS CUT LENGTH (EX. D2600-5-108 IS 108" LONG). D2600-5 EXTRUSION MANUFACTURED FROM:

- CARADON INDALEX DIE # MS-18871

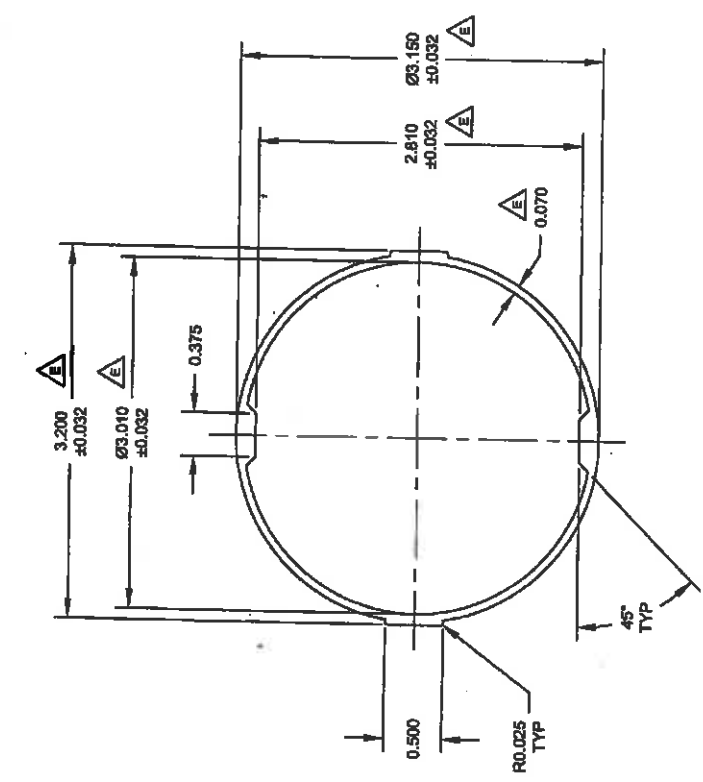
12) FOR D2600-7, PART NUMBER IS D2600-7-XXX WHERE XXX IS CUT LENGTH (EX. D2600-7-125 IS 125" LONG). D2600-7 EXTRUSION MANUFACTURED FROM:

- CARADON INDALEX DIE # MS-18872

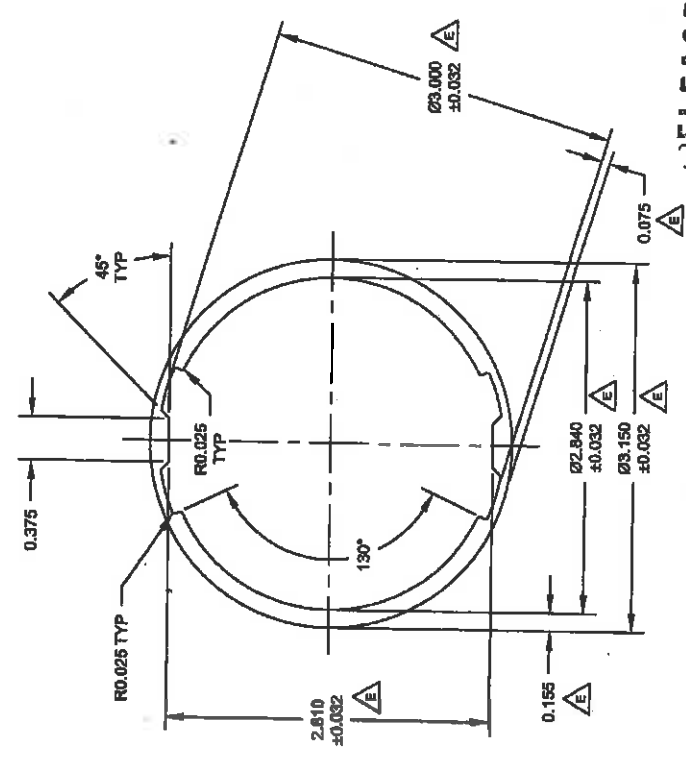
RELEASED
2012-07-11

E	REFORMAT DWG; ALL DIMS & TOL. UPDATE TO MATCH MFG DIE DWGS; ADD ASTM B221 SPEC (08-1)	CP	11.10.18
D	INCREASE MIN. UTS TO 40 KSI	DS	98.08.20
C	ADD D2600-3, UPDATE D2600-1 WIDTH, ADD DIE NO.	DS	98.04.16
B	CHANGE MATERIAL SPEC.	DS	97.09.09
A	NEW ISSUE	DS	97.01.21
REV.	DESCRIPTION	BY	DATE
DRAWN	DESIGN		
CHECKED			
MFG. APPR.	D2600		
APPROVED			
DIE APPR.			
DATE	11.10.18		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. REV. E			
SHEET 1 OF 3			
TITLE SCALE			
EXTRUSION NTS			
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8 7 6 5 4 3 2 1



D2800-1 EXTRUSION



D2800-3 EXTRUSION

RELEASED
2012-01-10

DESIGN	1	DART AEROSPACE LTD
DRAWN	1	HAWKESBURY, ONTARIO, CANADA
CHECKED	A.S	DRAWING NO.
MFG. APPR.	E	REV. E
APPROVED	11/10/18	SHEET 2 OF 3
DATE	11.10.18	SCALE
		NTS

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8 7 6 5 4 3 2 1



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **POHB044146**



Supplier: SIG001-VC
Signature Aluminum Canada Inc.
C/O/ T10322C
PO Box 4488, STN A
TORONTO
ON
M5W 4H1 Canada
Phone: 905-427-8550
Fax: 905-427-2246

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB044146
PO Date: 7/30/19
Due Date: 9/16/19
Purchase Order Revision:
Revision Date:
Ship-To Contact: Lavoie, Chantal
Phone: 613-623-5200 Ext: 242
Fax: 613-632-1053
clavoie@dartaero.com

Via: Ground
Pymt Terms: Net 30
Freight Terms:

Special Comments: quote on July 29, 2019
received replacement order on oct 17 2019

Items													
Line Item	Job	Part	Drawing	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	198425	D2600-1-190P	D2600		Extrusion Round 3" 206 EXTRUDE AS PER DWG D2600 REV. E EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF TUBE MATERIAL MUST BE SMOOTH AND FREE FROM DEFECT SCRATCHES,NICKS,DENTS NOTE: MUST BE WELL PACKAGE, IF NOT WILL BE REFUSE	Received	-	9/16/19	90 pcs	99 pcs	-9 pcs	\$42.528627/pcs	\$-382.76
2	202017	D2600-1-190P	D2600		Extrusion Round 3" 206 EXTRUDE AS PER DWG D2600 REV. E EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF TUBE MATERIAL MUST BE SMOOTH AND FREE FROM DEFECT SCRATCHES,NICKS,DENTS NOTE: MUST BE WELL PACKAGE, IF NOT WILL BE REFUSE	Firmed	-	10/18/19	99 pcs	0 pcs 99x	99 pcs At 12/18/19	\$42.5368/pcs	\$4,211.14
Line Item Note replacement order 137327 RMA # 20194288 invoice 9060313 will need credit for 99 pcs from previous order, extrusion was pick up by Signature Aluminum on Oct 17,2019 for 99 pcs on wo # 198425													
Grand Total:													\$3,828.39



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (813) 632-5200

PURCHASE ORDER
POHB044146



Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

CL

Plex 10/18/19 8:28 AM Dart.Lavole.Chantal



1850 Clements Road, Pickering Ontario, Canada L1W 3R8

Phone: (866) 587-5780 Fax: (905) 427-2207

Visit us at www.signaturealuminum.com

ACCT# 46024

SHIP TO / EXPÉDIÉ A

DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
CANADA

PHONE: 613-632-5200

SOLD TO / VENDUE A

DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
CANADA

PHONE: 613-632-5200

TERMS / FREIGHT

PP

REFER TO
THESE NUMBERS ON
ALL CORRESPONDANCE
REFEREZ-VOUS A CES
NUMEROS POUR TOUTE
CORRESPONDANCE

PACKING LIST

PACKING LIST DATE / DATE DU BODERIN	10-16-19
PACKING LIST NUMBER / N° DE BODEREAU	045217
SALES ORDER NUMBER / N° DE COM	137953

CUSTOMER ID / ID DU CLIENT	46024	ORDER DATE / DE LA COM	10/04/19	CUSTOMER PO NUMBER / CLIENT PO Number	POHB044148 REPLA	LOCATION	PIC	TRAILER NUMBER / REMORQUE Number	PUP#2	SALESMAN / VENDEUR	CREDIT REP / REP DU CRÉDIT	SALES REP / REP. DES VENTES	
ORIGINAL ORDER / QUANTITÉ / ORIGINAL				PREVIOUS / SHIPPED QUANTITY / PRÉCÉDENT		QUANTITY / QUANTITÉ		UNIT / UNITÉ		NET QUANTITY / QUANTITÉ NETTE		GATTENBOROU	
ITEM NO. / NUMÉRO				QUANTITY / QUANTITÉ		UNIT / UNITÉ		NET QUANTITY / QUANTITÉ NETTE		GATTENBOROU		D1K	

BILL OF LADING NUMBER / NO. DE CONNAISSEMENT		FINISH DESCRIPTION / DESCRIPTION DE FINITION		NBR OF PKGS / NBR DE PKGS		GROSS LBS / LIVRES BRUT		UNIT / UNITÉ		QUANTITY DUE / Quantité en raison	
6061 T6		ALLOY & TEMPER / ALLIAGE & TEMPER		6061 T6		4		1,612		1,541 LB	
DAA-897121-3		LENGTH / LONGUEUR		190.0000 IN		731		699 KG			
D2600-1-190P		CUTTING TOLERANCE / Tolérance de coupe		Cut (+): 0.1180		Min: -10 %		Max: 10 %			
				Cut (-): 0.0000							

001	1,429 LB	648 KG	90 PC	4	1,612	1,541 LB	699 KG	99 PC	434	452	28 PC
Y									437	454	28 PC
									437	454	28 PC
									234	251	15 PC

CUSTOMER PART NUMBER / NUMÉRO DE RÉFÉRENCE DU CLIENT		927893 / 516074		927893 / 516094		927893 / 516095		927893 / 516096		28 PC	
		927893 / 516094		927893 / 516094		927893 / 516095		927893 / 516096		28 PC	
		927893 / 516095		927893 / 516095		927893 / 516095		927893 / 516096		28 PC	
		927893 / 516096		927893 / 516096		927893 / 516096		927893 / 516096		15 PC	

Um

Transportation/Traffic damages and/or shortage claims are to be noted on the delivery copy of sellers shipping packing lists and signed and dated below by customers authorized representatives. No return materials will be accepted for credit without permission. The articles and/or services covered by this shipping packing list were produced in accordance with the fair labor standards act of 1938 as amended. Order accepted subject to the terms and conditions stated on our website.

Page 1 of 1

4	1,612	1,541 LB
	731	699 KG
		99 PC
TOTALS		

ACKNOWLEDGEMENT OF GOODS DELIVERED AND CONDITION

CUSTOMER

DATE OF DELIVERY

DRIVER



CERTIFICATE OF COMPLIANCE

SIGNATURE ALUMINUM CANADA

1850 CLEMENTS RD
PICKERING, ON L1W 3R8

Cert Date	Cert No.	Sales Order	Page
10/11/2019	5552344	137953	1
Cust PO	B/L No	Lot	Date
HB044146 REPLACN	045217	927893	10/16/19

Sold To	Ship To
46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 CANADA	46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 CANADA

Item No	Part No	Item Description	Cust Part
001	DAA-897121-3	190" Mill 6061 T6	D2600-1-190P
Gross Weight	1,612 LBS		
Net Qty	1,541 LBS	99 PCS	4 PKGS
Specification	Dis Desc		
AMS QQA 200/9 + ASTM B221-08			

Mechanical Tests:

<u>Tensile</u>	<u>Yield</u>			
<u>MPA / KSI</u>	<u>MPA / KSI</u>	<u>% Elongation</u>	<u>Conductivity</u>	<u>HRE</u>
318.0 / 46.1	275.9 / 40.0	11.6	N/A	90

Chemical Analysis:

<u>Si</u>	<u>Fe</u>	<u>Cu</u>	<u>Mn</u>	<u>Mg</u>	<u>Cr</u>	<u>Zn</u>	<u>Ti</u>	<u>V</u>	<u>Zr</u>
0.59	0.25	0.20	0.06	0.86	0.08	0.06	0.01	0.01	0.00

This Material is Made in Canada

This Material is RoHS Compliant

This will certify that the material described herein has been inspected and tested in accordance with Signature Aluminum Canada's standard sampling and testing procedures or in accordance with the requirements of any specification forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgement form. No other warranties are applicable.

S. Gooder
Quality Manager
Signature Aluminum Canada Inc

ISO 9001/TS16949 Registered Company

Visit us at www.signaturealuminum.com

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: D2600-1-190
 DATE: NOV 01 2019

PO / BATCH NO.: POHBO44146/
5223808

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 92 pcs
 QUANTITY INSPECTED: 92 pcs
 QUANTITY REJECTED: 47 pcs

THICKNESS ORDERED: 3" 0
 THICKNESS RECEIVED: 3" 0
 SHEET SIZE ORDERED: -
 SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	☒ Y	☒ N	
CORRECT FINISH	☒ Y	☒ N	
CORROSION	☒ Y	☒ N	
CORRECT GRAIN DIRECTION	☒ Y	☒ N	
CORRECT MATERIAL PER M-DRAWING	☒ Y	☒ N	<u>ASTM B221</u>
CORRECT THICKNESS	☒ Y	☒ N	
PHOTO REQUIRED	☒ Y	☒ N	
CORRECT REF # TO LINK CERT	☒ Y	☒ N	<u>JLT: 927893</u>
CORRECT MATERIAL IDENTIFICATION	☒ Y	☒ N	
CORRECT M# ON THE MATERIAL	☒ Y	☒ N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	☒ Y	☒ N	
DOES THIS REQUIRE AN EXTRUSION REPORT	☒ Y	☒ N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: _____	DAS 81 9-89	SIGNED OFF BY: _____	
DATE: <u>NOV 01 2019</u>		DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in